

Stress, length, and moraic trochees in Northern Tiwa Picurís  
Stephanie Sin-yun Shih

Spoken in central New Mexico, Picurís is an endangered language of the Northern Tiwa sub-group, a branch of Kiowa-Tanoan. Not much has been previously understood about Picurís phonology beyond its phonemic segments; in particular, there are several conflicting descriptions of the prominence system of the language. In the earliest work on Picurís, John Harrington claims that Picurís has no stress, noting that Picurís “syllables are pronounced with force so nearly equal that stress accent has not been indicated” (Harrington 1910: 22). Instead, Harrington chooses to record only length in his phonetically transcribed collection of Picurís texts and children’s stories (Harrington and Roberts 1928). In later work, George Trager and all subsequent researchers describe Picurís as a stress- and tone-based language, where stress and tone influence syllable length (Trager, G. 1942; Trager, F. 1971; a.o.). None of this later work, however, records length distinctions or alternations, and, more critically, no consistent description of the lengthening effects of stress and tone is given. Typologically as well, a phonological system with unrelated contrastive length, tone, and stress is highly improbable.

This study, using Harrington and Roberts’ (1928) transcribed stories as well as data from later work on Picurís (e.g., Trager, G. 1942, 1943; Trager, F. 1971; a.o.), provides a unified account of length and prominence in Picurís nouns, arguing that Picurís is a quantity-sensitive language where the basic unit of the moraic trochee governs both stress and syllable weight. Stress-independent evidence from the minimal word constraint, the shape of syllables and mono-moraic diphthongs, and sonority hierarchy restrictions in syllable nuclei indicate that the basic rhythmic unit in Picurís is the moraic trochee. The significant prevalence of even-parity nouns (91/110,  $\chi^2 = 6.68$ ,  $p < 0.01$ ) in the length-marked Harrington and Roberts (1928) data also suggests that bimoraic footing plays a crucial role in the language. A comparison of stress-based observations from later work and the length-based data in Harrington’s work demonstrates that main stress of a word typically falls on the penultimate syllable with secondary stress assigned to the preceding feet from right to left (e.g., (*mako*)<sub>φ</sub>(*‘one*)<sub>φ</sub> ‘grandchild’; (*ča:*)<sub>φ</sub>(*‘hənɛ*)<sub>φ</sub> ‘witch’), as predicted by the moraic trochee analysis hypothesized in this paper. Furthermore, the cross-referencing of Trager (1971) with Harrington and Roberts (1928) shows that Picurís repairs stress clash and degenerate feet via vowel lengthening processes.

This paper reconciles the once-divergent and competing theories about Picurís stress and length between Harrington and later researchers in a generative analysis of Picurís suprasegmental phonology. In many respects, Picurís is a language that exemplifies the characteristics expected of quantity-sensitive languages, with a dispreference for degenerate feet and a strong preference for strict moraic trochees.

Selected references

- Harrington, John P. 1910. “An introductory paper on the Tiwa language, dialect of Taos, New Mexico.” *American Anthropologist*. 12(1): 11-48.
- Harrington, John P. and Helen H. Roberts. 1928. “Picurís Children’s Stories with Texts and Songs.” 43<sup>rd</sup> *Annual Report, Bureau of American Ethnology*, 1925-1926. Washington, D.C.: U.S. Government Printing Office.
- Nichols, Lynn. 1994. “Vowel copy and stress in Northern Tiwa.” S. Epstein et al. (ed). *Harvard Working Papers in Linguistics*. 4:133-140.
- Trager, Felicia Harben. 1971. “The Phonology of Picurís.” *International Journal of American Linguistics*. 37: 29-33.
- Trager, George L. 1942. “Historical Phonology of Tiwa Languages.” *Studies in Linguistics*. 1(5): 1-10.
- Trager, George L. 1943. “The Kinship and Status Terms of the Tiwa Languages.” *American Anthropologist*. 45: 557-571.
- Zaharlick, Amy. 1981. “A Preliminary Examination of Tone in Picurís.” *The Journal of the Linguistic Association of the Southwest*. 4(2): 123-129